

Appl. No. 10/505,269  
Amdt. Dated June 1, 2006  
Reply to Office Action of March 2, 2006

**Listing of Claims:**

1. (Currently Amended) An electronic signal processing apparatus with a signal switch, the switch comprising:
  - a switch input, a switch output and an internal node;
  - a first and a second depletion transistor, having main current channels coupled between the internal node and the switch input and output, respectively;
  - a signal processing arrangement between the internal node and a reference terminal of the switch input and switch output, the signal processing arrangement comprising:
    - a diode; and
    - a switch control circuit with a control output, coupled to the main current channels of the first and the second depletion transistor via the internal node so as to control conduction of the main current channels,

wherein the switch has a T-type attenuator structure having a leg and at least one branch, the diode being disposed in the leg of the T-type attenuator structure and at least one transistor being disposed in the branch of the T-type attenuator structure, the T-type structure enabling the switch to remain "on" even in the absence of a power supply voltage, and

wherein the internal node applies a control voltage that switches the switch to both the transmitter and the diode "off". ~~the diode being coupled to the internal node so that a DC potential at a terminal of the diode, which controls on/off switching of the diode, is determined by a potential of the internal node in opposition to on/off switching of the main current channels.~~
2. (Previously Amended) An electronic signal processing apparatus as claimed in claim 1, wherein the diode is part of a current path from the control output to the internal node, so that the diode is forward-biased when a control voltage that makes the main current channels non-conductive is applied from the control output to the main current channels via the diode.

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3. (Currently Amended) An electronic signal switch, the switch comprising

- a switch input, a switch output and an internal node;
- a first and a second depletion transistor, having main current channels coupled between the internal node and the switch input and switch output, respectively;
- a signal connection between the internal node and a reference terminal of the switch input and output, the signal connection comprising:
  - a diode; and
  - a control input, coupled to the main current channel of the first and the second depletion transistor via the internal node to control conduction of the main current channels,

wherein the switch has a T-type attenuator structure having a leg and at least one branch, the diode being disposed in the leg of the T-type attenuator structure and at least one transistor being disposed in the branch of the T-type attenuator structure, the T-type structure enabling the switch to remain "on" even in the absence of a power supply voltage, and

wherein the internal node applies a control voltage that switches the switch to both the transmitter and the diode "off". the diode being coupled to the internal node so that a DC potential at a terminal of the diode, which controls on/off switching of the diode, is determined by a potential of the internal node in opposition to on/off switching of the main current channels.

4. (Previously Amended) An electronic signal switch as claimed in claim 3, wherein the diode is part of a current path from the control input to the internal node, so that the diode is forward-biased when a control voltage that makes the main current channels non-conductive is applied from the control output to the main current channels via the diode.